

Title (en)  
ENERGY CONVERTER

Title (de)  
ENERGIEWANDLER

Title (fr)  
CONVERTISSEUR D'ÉNERGIE

Publication  
**EP 2496829 B1 20131225 (EN)**

Application  
**EP 10782348 A 20101103**

Priority  
• GB 0919233 A 20091103  
• GB 2010002028 W 20101103

Abstract (en)  
[origin: GB2475049A] A long attenuator sea wave energy converter 10 comprises a floating flexible hose 25, suction coupled to the wave surface eg by means of flexible side fins 26, that transfers energy to an internal elastic spine 30 that is under buckling compression, which drives a diaphragm seal 35 that pumps atmospheric air through upper and lower air passages 40, 41 at the propagation velocity of the waves. The diaphragm seal 35 may be consist of a series of distorted shaped sheets (47, fig.7) which are unstable as flat sheets and which are arranged with alternating opposite profiles (48,49) joined by transition sections (51). Transition between the profiles (48,49) is driven by wave action such that the transition sections (51) act as pistons. The air pressure increases along the flexible hose 25 to produce compressed air for delivery by a riser 16 to the seabed and thence via a pipe 17 to land where it can be converted to electricity or by a pipe 18 to seabed storage. Membrane technology is used extensively to aid survival and to minimise costs.

IPC 8 full level  
**F03B 13/18** (2006.01); **F03B 13/24** (2006.01)

CPC (source: EP GB US)  
**F03B 13/188** (2013.01 - EP GB US); **F03B 13/24** (2013.01 - EP GB US); **Y02E 10/30** (2013.01 - EP GB US)

Cited by  
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DOCDB simple family (publication)  
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